

**HARDWARE DEBUG DEVICE HAVING SCRIPT-BASED HOST
INTERFACE**

David Fritz

Blane Fowler

ABSTRACT OF THE DISCLOSURE

A hardware debug device is usable to debug a target such as a microcontroller or microprocessor. A host instructs the hardware debug device what tests to perform on the target by sending a non-compiled script of text across a standardized script-based interface. The hardware debug device receives and interprets the script and sends appropriate microcommands to the on-chip debugger of the target to carry out actions specified by the script. The syntax of the interpreted script language is rich and allows scripts to define complex looping and testing actions. New scripts can be written to accommodate different target processors without changing the hardware debug device. Because complex testing operations are performed by the hardware debug device, network traffic at the host is reduced. The use of the interpreter and scripts also allows the cost of the hardware debug device to be reduced and reliability of the device to be increased.